

INFORMATION DISCLOSURE STATEMENT

Applicant : Martin E. Fermann et al.
App. No. : 10/627,069
Filed : July 25, 2003
For : POLARIZATION
MAINTAINING DISPERSION
CONTROLLED FIBER
LASER SOURCE OF
ULTRASHORT PULSES
Examiner : Unknown
Group Art Unit : Unknown

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October 22, 2003

(Date)

James B. Bear, Reg. No. 25,221

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing one hundred eight (108) references, of which thirty-eight (38) are non-U.S. patent references, copies enclosed.

This Information Disclosure Statement is being filed within three months of the filing date of this application and no fee is required in accordance with 37 C.F.R. § 1.97(b)(1), (b)(2), or (b)(4).

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 10/22/03

By:

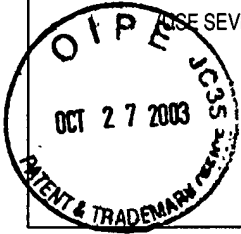
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Attorney of Record
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FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. IMRAA.021A	APPLICATION NO. 10/627,069
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)		APPLICANT Martin E. Fermann et al.	
		FILING DATE July 25, 2003	GROUP Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	1.	3,409,843	11/05/68	BOWNESS			
	2.	3,548,312	06/08/71	STATZ			
	3.	3,729,690	04/24/73	SNITZER			
	4.	3,801,931	04/02/74	HEFLINGER, ET AL.			
	5.	3,973,828	08/76	ONODA, ET AL.			
	6.	3,928,818	12/23/75	WHITE			
	7.	3,978,429	08/76	IPPEN ET AL.	372	18	05/27/75
	8.	4,787,927	11/88	MEARS, ET AL.			
	9.	4,864,577	09/05/89	AOSHIMA, ET AL.			
	10.	4,991,923	09/89	AOSHIMA, ET AL.			
	11.	5,005,175	04/02/91	DESURVIRE, ET AL.			
	12.	5,008,887	04/91	KAFKA ET AL.	372	6	04/19/89
	13.	5,050,183	09/17/91	DULING, III	372	6	
	14.	5,067,134	11/91	OOMEN			
	15.	5,136,598	08/04/92	WELLER, ET AL.			
	16.	5,163,059	11/92	NEGUS, ET AL.	272	18	09/09/91
	17.	5,189,676	02/23/93	WY SOCKI, ET AL.			
	18.	5,222,089	06/22/93	HUBER			
	19.	5,226,049	07/93	GRUBB			
	20.	5,272,560	12/21/93	BANEY, ET AL.			
	21.	5,303,314	04/12/94	DULING, III ET AL.	372	6	03/15/93
	22.	5,311,603	05/10/94	FIDRIC			
	23.	5,361,161	11/01/94	BANEY, ET AL.			
	24.	5,363,386	11/94	SMITH			
	25.	5,400,350					
	26.	5,414,725					
	27.	5,422,897	06/95	WYATT, ET AL.			
	28.	5,436,925	07/25/95	LIN, ET AL.			

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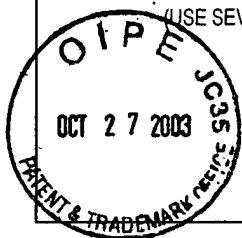
U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	29.	5,440,573					
	30.	5,448,579	09/95	CHANG ET AL.	372	18	12/09/93
	31.	5,450,427	09/95	FERMAN ET AL.	372	6	10/21/94
	32.	5,479,422					
	33.	5,499,134					
	34.	5,513,194	04/30/96	TAMURA ET AL.			
	35.	5,585,913					
	36.	5,617,434	04/01/97	TAMURA, ET AL.			
	37.	5,627,848	05/1997	FERMANN ET AL.	372	102	
	38.	5,633,885					
	39.	5,659,558	08/97	TOHMON, ET AL.			
	40.	5,663,731					
	41.	5,677,769					
	42.	5,689,519	11/18/97	FERMANN ET AL.			
	43.	5,696,782					
	44.	5,701,319					
	45.	5,818,630					
	46.	5,844,927	12/98	KRINGLEBOTN			
	47.	5,847,863					
	48.	5,861,970	01/1999	TATHAM ET AL.	359	161	
	49.	5,862,287	01/1999	HIGASHI, MASAYUKI	29	832	
	50.	5,867,304					
	51.	5,880,877					
	52.	5,920,668					
	53.	5,923,686					
	54.	5,995,175	04/91	DESURVIRE, ET AL.			
	55.	6,014,249					
	56.	6,020,591					
	57.	6,034,975	03/2000	HARTER ET AL.	372	18	

FORM PTO-1449

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	58.	6,072,811					
	59.	6,154,310					
	60.	6,181,463					
	61.	6,188,705	02/01	KRAINAK, ET AL.			
	62.	6,198,568					
	63.	6,208,458					
	64.	6,249,630 B1	06/2001	STOCK ET AL.	359	161	
	65.	6,252,892					
	66.	6,275,512					
	67.	6,320,885	11/01	KAWAI, ET AL.			
	68.	6,334,011					
	69.	6,373,867	04/2002	LIN ET AL.	327	18	
	70.	6,549,547					


FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	71.	0352974	01/31/90	EUROPE				
	72.	0564098	10/93	EUROPE				
	73.	56-165385	12/81	JAPANESE ABSTRACT				X

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

EXAMINER INITIAL		
	74.	Snitzer, "Proposed Fiber Cavities for Optical Masers," <u>Journal of Applied Physics</u> , Vol. 32, No. 1, Jan. 1961, pp. 36-39.
	75.	Koester, et al., "Amplification in a Fiber Laser," <u>Applied Optics</u> , Vol. 3, No. 10, Oct. 1964, pp. 1182-1186.
	76.	Manni, "Two-Photon Excitation Expands the Capabilities of Laser-Scanning Microscopy," <u>Biophotonics International</u> , Jan./Feb. 1996, pp. 44-48, 50 and 52.
	77.	Krasinski, et al., "Multipass Amplifiers Using Optical Circulators," <u>IEEE Journal of Quantum Electronics</u> , Vol. 26, No. 5, May 1990, pages 950-958.
	78.	Tamura, et al., "Unidirectional ring resonators for self-starting passively mode-locked lasers," <u>Optics Letters</u> , Vol. 18, No. 3, Feb. 1, 1993, pp. 220-222.

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	79.	Ober, et al., "42-fs pulse generation from a mode-locked fiber laser started with a moving mirror," <i>Optics Letters</i> , Vol. 18, No. 5, March 1, 1993, pp. 367-369.
	80.	Hofer, et al., "Mode locking with cross-phase and self-phase modulation," <i>Optics Letters</i> , Vol. 16, No. 7, April 1, 1991, pp. 502-504.
	81.	Hofer, et al., "Characterization of Ultrashort Pulse Formation in Passively Mode-Locked Fiber Lasers," <i>IEEE Journal of Quantum Electronics</i> , Vol. 28, No. 3, March, 1992, pp. 720-728.
	82.	Ippen, et al., "Additive pulse mode locking," <i>Optical Society of America</i> , Vol. 6, No. 9, September 1989, pp. 1736-1745.
	83.	Taverner, et al., "Polarisation Maintaining Figure-8 Laser," believed to have been presented at the Optical Society America Topical Meeting on Nonlinear Guided Wave Phenomena, Cambridge, England, September 20-22, 1993, paper WC3, pp. 367-370 and pp. 1-4.
	84.	Duling, III, et al., "A Single-Polarization Er-Doped Fiber Amplifier," believed to have been presented at a conference on Lasers and Electro-Optics, Vol. 12 of 992 OSA Tech. Digest Series, paper CPDP 28. (1992), pp. 694-695.
	85.	Krausz, et al., "Passive mode locking in standing-wave laser resonators," <i>Optics Letters</i> , Vol. 18, No. 11, June 1, 1993, pp. 888-890.
	86.	Tamura, et al., "77-fs pulse generation from a stretched-pulse mode-locked all fiber ring laser," <i>Optics Letters</i> , Vol. 18, No. 13, July 1, 1993, pp. 1080-1082.
	87.	Kelly, "Characteristic sideband instability of the periodically amplified average soliton," <i>Electronic Letters</i> , Vol. 28, No. 8, April 9, 1992, 1992, pp. 806-807.
	88.	Menyuk, "Stability of solitons in birefringent optical fibers. II. Arbitrary amplitudes," <i>Optical Society of America</i> , Vol. 5, No. 2, February, 1988, pp. 392-402.
	89.	Fermann, et al., "Additive-pulse-compression mode locking of a neodymium fiber laser," <i>Optical Letters</i> , Vol. 16, No. 4, Feb. 15, 1991, pp. 244-246.
	90.	Fermann, et al., "Passive mode locking in erbium fiber lasers with negative group delay," <i>Appl. Phys. Letter</i> , Vol. 62, March 1, 1993, pp. 910-912.
	91.	Duling, III, "All-fiber ring soliton laser mode locked with a nonlinear mirror," <i>Optics Letters</i> , Vol. 16, No. 8, April 15, 1991, pp. 539-541.
	92.	Walling, et al., "Tunable Alexandrite Lasers: Development and Performance," <i>IEEE Journal of Quantum Electronics</i> , Vol. QE-21, No. 10, Oct. 1985, pp. 1568-1581.
	93.	Harter, et al., "Low-magnification unstable resonators used with ruby and alexandrite lasers," <i>Optics Letters</i> , Vol. 11, No. 11, Nov. 1986, pp. 706-708.
	94.	Harter, et al., "Short pulse amplification in tunable solid state materials," <i>SPIE</i> , Vol. 1229, 1990, pp. 19-28.
	95.	Poole, et al., "Fabrication of Low-Loss Optical Fibres Containing Rare-Earth Ions," <i>Electronics Letters</i> , Vol. 21, No. 17, Aug. 15, 1985, pp. 737-738.
	96.	Fermann, et al., "Passive mode locking by using nonlinear polarization evolution in a polarization-maintaining erbium-doped fiber," <i>OPTICS Letters</i> , Vol. 18, No. 11, June 1, 1993, pp. 894-896.
	97.	Morioka, et al., "Ultrafast Reflective Optical Kerr Demultiplexer Using Polarisation Rotation Mirror," <i>Electronics Letters</i> , Vol. 28, No. 6, March 12, 1992, pp. 521-522.
	98.	Duling, III, et al., "Single-Polarisation Fibre Amplifier," <i>Electronics Letters</i> , Vol. 28, No. 12, June 4, 1992, pp. 1126-1128.
	99.	Matsas, et al., "Self-Starting Passively Mode-Locked Fabry-Perot Fiber Soliton Laser Using Nonlinear Polarization Evolution," <i>IEEE Photonics Technology Letters</i> , Vol. 5, No. 5, May 5, 1993, pp. 492-494.
	100.	Ober, et al., "Self-starting diode-pumped femtosecond Nd fiber laser", <i>OPTICS LETTERS</i> , Vol. 18, No. 18, September 15, 1993, pp. 1532-1534.
	101.	Fermann, et al., "Environmentally stable Kerr-type mode-locked erbium fiber laser producing 360-fs pulses," <i>OPTICS LETTERS</i> , Vol. 19, No. 1, January 1, 1994, pp. 43-45.
	102.	Fermann, "Ultrashort-Pulse Sources Based on Single-Mode Rare-Earth-Doped Fibers," <i>Applied Physics B</i> , Vol. 58, 1994, pp. 197-209.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. IMRAA.021A	APPLICATION NO. 10/627,069
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	103. Desurvire, et al., "High-gain erbium-doped traveling-wave fiber amplifier," <u>Optics Letters</u> , Vol. 12, No. 11, November 1987, pp. 888-890.
	104. Loh, et al., "All-solid-state subpicosecond passively mode locked erbium-doped fiber laser," <u>Applied Physics Letters</u> , Vol. 63, No. 1, July 5, 1993, pp. 4-6.
	105. Barnett, et al., "High-power erbium-doped fiber laser mode locked by a semiconductor saturable absorber," <u>Optics Letters</u> , Vol. 20, No. 5, March 1995, pp. 471-473.
	106. Loh, et al. "Diode-Pumped Selfstarting Passively Modelocked Neodymium-Doped Fibre Laser," <u>Electronics Letters</u> , Vol. 29, No. 9, April 29, 1993, pp. 808-810.
	107. Duling, III, "Compact sources of ultrashort pulses," date unknown, pp. 179-207. Copy not available.
	108. Reddy, et al., "A Turnkey 1.5 :m Picosecond Er/Yb Fiber Laser," <u>Conference On Optical Fiber Communication</u> , OFC, paper PD17, 1993. Copy not available.

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	